

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-15. (cancelled)

16. (new) A method of producing a single crystal of fluoride having a predetermined cross-sectional configuration, comprising providing a crucible having a hole at a bottom thereof whose shape is the same as said predetermined cross-sectional configuration, providing melted fluoride material in said crucible, and pulling down a single crystal from said fluoride material through said hole.

17. (new) The fluoride crystal production method of claim 16, wherein the crucible has an outer bottom provided with a projected portion which has a lower surface in said predetermined cross-sectional configuration.

18. (new) The fluoride crystal production method of claim 17, wherein the projected portion has a height difference of 1mm or more.

19. (new) The fluoride crystal production method of claim 16, wherein the hole is provided in plural.

20. (new) The fluoride crystal production method of claim 16, wherein said face shape is configured to be within an extent narrower than an extent which the melt from the hole moves along.

21. (new) The fluoride crystal production method of claim 17, wherein the hole is provided in plural.

22. (new) The fluoride crystal production method of claim 18, wherein the hole is provided in plural.

23. (new) The fluoride crystal production method of claim 17, wherein said face shape is configured to be within an extent narrower than an extent which the melt from the hole moves along.

24. (new) The fluoride crystal production method of claim 18, wherein said face shape is configured to be within an extent narrower than an extent which the melt from the hole moves along.

25. (new) The fluoride crystal production method of claim 19, wherein said face shape is configured to be within an extent narrower than an extent which the melt from the hole moves along.

26. (new) The fluoride crystal production method of claim 16, further comprising providing a seed crystal in said hole prior to pulling down said single crystal.